

is directed to a sheet metal router apparatus that comprises a guide for the router, fastened to the sheet metal by fasteners drilled through the metal, a platform mounted on the guide, and a router having a vertical adjustment, mounted on the platform. The claim includes a further limitation that the operator adjusts the router vertical adjustment for a desired depth-of-cut and moves the platform continuously along the guide to make the desired cut in the sheet metal.

Dunlap is directed to a tool guide support and saw guard. The object of Dunlap's invention is to secure a workpiece to a flat surface, such as a table, so that the operator can safely observe the progress of a dangerous tool, such as a saw blade, as it traverses the workpiece, in order to control the operation of the tool and thereby insure its successful cutting. *See* col. 1, lines 55-63 ("this results in the actual working area and the tool during the working operation being hidden from view and it is many times impossible to determine if the work is being performed properly by the tool").

Dunlap neither suggests nor describes a router or a sheet metal router. Dunlap has no guide, fastened to the sheet metal by fasteners drilled through the sheet metal. Rather, the power saw in Dunlap uses a guide which is "secured to the workpiece top surface 60 by any usual clamping means, not shown, or by any of the usual adhesives so as to be removable from this workpiece surface." Col. 4, lines 46-50 (emphasis added). There is no vertical adjustment as claimed in claim 12, wherein an operator adjusts the vertical adjustment for a desired depth-of-cut. Instead, in Dunlap there is a "resilient means in the form of a coil spring 52 . . . for normally resiliently urging the vertical mounting plate and therefore the saw 10 reciprocally upwardly . . . but yet permitting downward movement of the saw 10 . . . so that the saw blade 30 can be moved downwradly [sic] through the bottom opening of the tool guard and into working engagement with a workpiece." Col. 4, lines 18-28. Thus, Dunlap does not teach a sheet metal router, a guide fastened to sheet metal by fasteners drilled through metal, nor a router having a vertical adjustment. More generally, Dunlap does not teach a router with a guide fastened to a workpiece by fasteners drilled through the workpiece, nor does Dunlap teach a power tool having a vertical adjustment that allows an operator to make a desired depth of cut.

The Examiner states that Woods teaches a more rigid attachment of a guide that is inherent in the use of fasteners, and that it would have been obvious to adapt known fastening means as taught in Woods to modify the attachment means of Dunlap. Woods, as mentioned above, teaches an automatic traversing drilling unit and method of using. Woods does not

mention "router," nor is there any mention of vertical adjustment, because drills, of course, function by freely changing their vertical position while drilling. Therefore, Woods does not teach a router, nor a sheet metal router, nor a router having a vertical adjustment as claimed.

Combining the two references, the templates or guides of Woods would somehow secure the power saw of Dunlap (on a spring for up and down movement) to the workpiece. However, the two references combined do not describe or suggest the invention claimed in Claim 12 of the present application (and in its dependent claims), a sheet metal router apparatus comprising a guide fastened by fasteners drilled through the sheet metal, a platform, and a router having a vertical adjustment. Applicants submit that the rejections of Claims 12-21 are overcome, and respectfully request the Examiner to withdraw the rejections of Claims 12-21 under 35 U.S.C. § 103(a).

3. The Examiner has also rejected Claims 1-10 and 22-25 under 35 U.S.C. § 103(a) as being unpatentable over Dunlap in view of Woods and further in view of U.S. Pat. No. 4,850,796 to Ase Stornetta ("Stornetta"). Although Claim 11 is not mentioned in this rejection, the Examiner states in the Office Action Summary that Claims 1-25 were rejected, and Applicants assume the Examiner also meant to reject Claim 11 in this rejection. Stornetta teaches a vacuum attachment. The Examiner states that the rationale for the rejection includes the arguments made above for Dunlap in view of Woods, and that it would have been obvious to one of ordinary skill in the art to use the device of Stornetta to achieve the benefits as set forth in Stornetta and also to reduce the hazard to the operator.

Applicants also traverse this rejection. It is improper to combine the references, since there is no suggestion in such varied prior arts to combine the references. Further, since the references are directed to very different arts, as outlined above, combining the references does not lead to a workable combination. In order to combine references for a prima facie case of obviousness, there must be a reasonable expectation of success in the combination. M.P.E.P. 2143. Even if combined, the combination of the references, even though improper, does not teach the invention claimed in Claims 1 and 22, and in their dependent claims. Claim 1, for instance, recites an aircraft skin lap router apparatus that comprises a guide fastened to the skin with fasteners drilled through the skin, a platform mounted on the guide, and a router having a vertical adjustment, mounted on the platform. There is also a vacuum fitting, mounted on the

platform. Claim 22 also recites an aircraft skin lap router apparatus, this claim including limitations of a nylon guide, a platform mounted on the guide and interfacing with the guide with at least one bearing. There is a router having a vertical adjustment within one-thousandth of an inch, an end mill mounted on the router, and a vacuum fitting mounted on the platform.

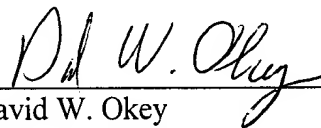
The Examiner's arguments for Dunlap and Woods have been reviewed, see above, while Stornetta is directed to adding a vacuum attachment for a portable router. The Examiner states that the use of a vacuum fitting for collecting machining debris is well known, and that it would have been obvious to modify the device of Dunlap as modified by Woods to add a vacuum attachment. Applicants traverse the rejection on the grounds that the combination is not taught by Dunlap and Woods. As noted, however, Stornetta specifically teaches a portable router (emphasis added). Fig. 3 of Stornetta depicts a sub-base and a cutting template used to help the operator guide the router in cutting a wooden door. "The router is guided by the operator around the interior edge of the template with the sub base contacting the template." Col. 5, lines 49-51. Stornetta thus achieves his purposes with a portable router and other tools to guide the router. Dunlap and Woods, of course, teach a power tool that is fastened to the workpiece, the precise opposite of Stornetta.

As noted above, Dunlap and Woods do not teach the invention claimed in Claim 12, a sheet metal router mounted on a platform the platform mounted on a guide that is fastened to the sheet metal to be routed with fasteners drilled through the sheet metal. Combining Dunlap and Woods also does not teach the inventions claimed in Claim 1 (an aircraft skin lap router apparatus, including a guide fastened to the skin by fasteners drilled through the skin) or Claim 22 (an aircraft skin lap router apparatus including a nylon guide fastened to the skin by fasteners drilled through the skin). Adding the vacuum fitting of Stornetta to Dunlap and Woods does not teach the inventions claimed in Claims 1 and 22 and in their dependent claims. Accordingly, Applicants submit the rejections of Claim 1-11 and 22-25 are overcome. The Examiner is respectfully requested to withdraw the rejections of Claims 1-11 and 22-25 under 35 U.S.C. § 103(a).

4. Applicants request that the Examiner withdraw the rejections of Claims 1-25 under 35 U.S.C. § 103(a). Applicants believe that the Claims are in form for allowance, and respectfully

request the Examiner to advance the claims to allowance. The Examiner is respectfully requested to call the undersigned if such will help expedite the allowance of the claims.

Respectfully submitted,

A handwritten signature in cursive script, reading "David W. Okey", is written over a horizontal line.

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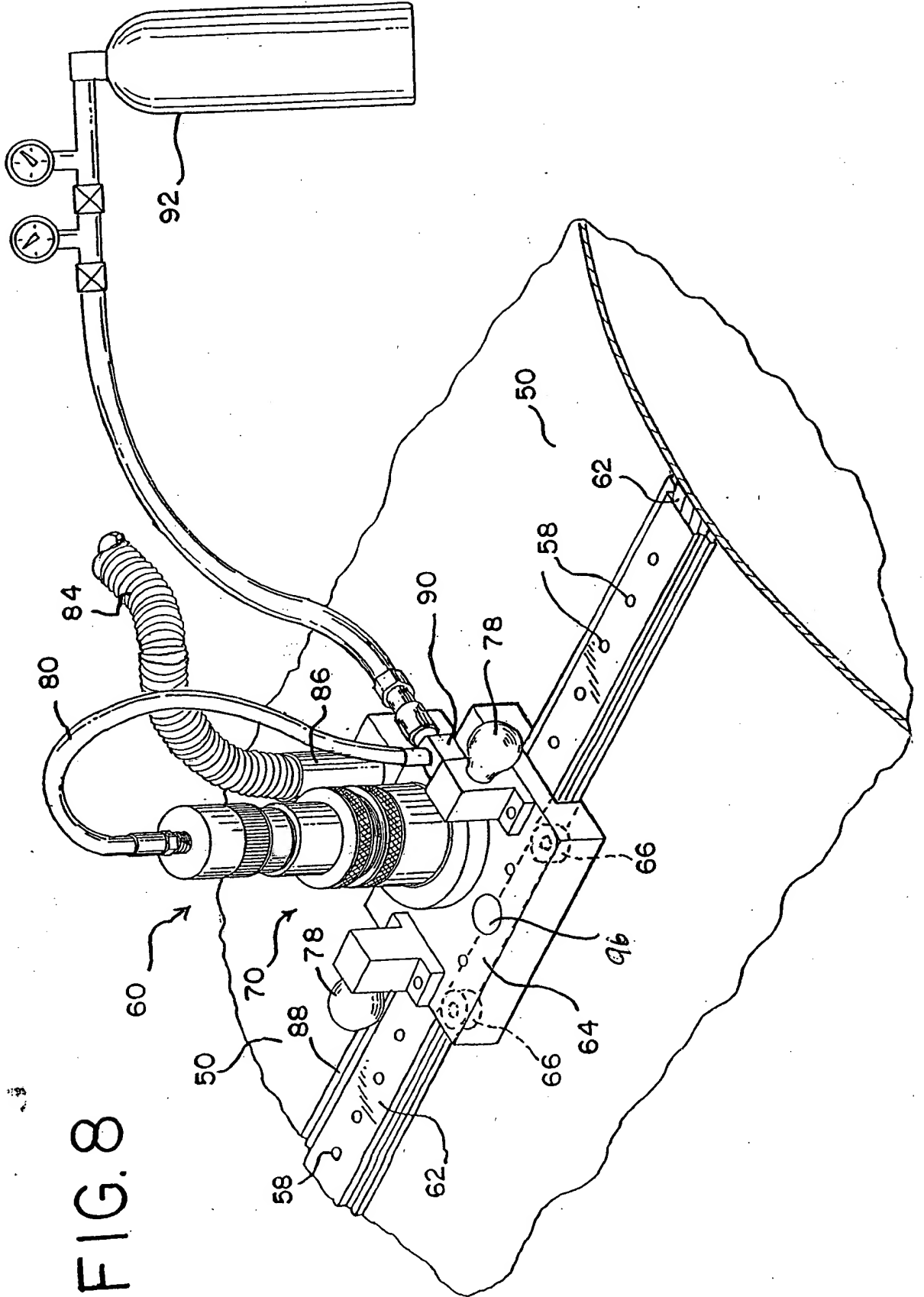


FIG. 8